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ABSTRACT

This study examined the possibilities that young children's gender elicits differential academic expectations from aspiring teachers, and aspiring teachers' gender and (socioeconomic) SES affect their academic expectations for young children. A questionnaire asked 103 university students majoring in education: (1) how difficult and how interesting they expected the school subjects of math, music, physical education, reading, and social studies to be for a child entering first grade; (2) how hard they expected the child would have to work at each school subject; and (3) what school marks they expected the child would receive in each subject on the first report card. For half the participants, the child was male; for half the child was female. Information on participants' SES was also obtained. Results indicated that participants expected boys to have greater interest in physical education than girls, and girls to have greater interest in music and higher marks in reading than boys. Female participants expected young children to work less hard in music than did male participants. A list of 20 references is included. (Author/BC)

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Music, Physical Education, and Reading: Adults' Expectations for Young Children

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Abstract

The purpose of this study was to determine (a) if the gender of young children elicits differential academic expectations from participants of this study, who were college students aspiring to become parents and teachers; and (b) if the participants' gender and SES affect their academic expectations for young children. Academic expectations were measured by questions that asked participants to indicate how difficult and how interesting they expected each school subject (math, music, physical education, reading, social studies) to be for a young child (one who was entering grade one in school), how hard they expected the young child would have to work at each school subject, and how high a school mark in each school subject they expected the young child to receive when the first report card came home. Results showed evidence of stereotyped academic expectations for young children based on the gender of a young child. The implications of these findings are discussed.

Music, Physical Education, and Reading: Adults' Expectations for Young Children

Research has shown that adults' aspirations and expectations for achievement is an important source of influence on children's intellectual/academic achievement (see, e.g., Hess & Holloway, 1984; Scott-Jones, 1984). A positive relationship has been established in earlier research between adults' expectations for children's achievement behaviors and children's actual achievement-related behaviors (see, e.g., Crandall, 1969; Rosen & D'Andrade, 1959; Winterbottom, 1958). Adults' aspirations and expectations are considered important because they may serve as cognitive mediators of adults' behaviors toward children (Hess, 1981; Scott-Jones, 1984), thereby influencing the achievement behaviors of children. Thus, other things being equal, one might expect that an adult who has high expectation for a child to do well in school is likely to monitor the child more closely, which in turn might be expected to lead to a higher level of achievement on the part of the child.

Research in the area of adults' expectations often focuses on socioeconomic status (SES) and sex differences in intellectual/academic performance (see, e.g., Marcus & Corsini, 1978; Entwisle & Baker, 1983; Rodman & Voydanoff, 1978), and on older children, those who are in the intermediate grades and higher (see, e.g., a review by

Seginer, 1983). Relatively little research in the area of adults' expectations has been conducted for younger (primary grades) children.

In one recent study with children in grades one, two, and three, Entwisle and Baker (1983) examined adults' expectations on children's performance in two academic subjects, namely, math and reading. They found that middle-class parents (mostly mothers) expected boys to get better marks in arithmetic and girls to get better marks in reading at each of the three grade levels. Further, they found this pattern of adults' expectations to be identical to the pattern of expectations held by the children themselves. Accordingly, they concluded that "At least in the formative years of early schooling, gender seems to be a characteristic that can elicit differential and powerful socialization by middle-class parents" (Entwisle & Baker, 1983, p.209).

Can these findings of Entwisle and Baker (1983) be replicated among aspiring parents and teachers? In other words, will the gender of a young child elicit differential academic expectations from aspiring parents and teachers? One purpose of this study was to address this question.

The population of aspiring parents and teachers was chosen to be studied because this population of adults will have direct influence on children, and findings concerning factors that would affect their expectations for children would make a positive contribution to the body of knowledge

in the area of adult expectations for children. Furthermore, the present study has important educational implications in that if the findings indicate that aspiring parents' and teachers' expectations for children are influenced by the gender of the child, then it would become necessary to draw this to their attention, and to help them avoid forming expectations that are inappropriate for children, thereby promoting the development of children under their care. In other words, as gender-related, or sex-typed, expectations for children may conceivably restrict the development of full potential in children, findings that indicate the existence of sex-typed expectations would suggest the need for efforts that are designed to correct such impeding expectations.

One might note here that in the study by Entwisle and Baker (1983) discussed earlier, the focus was on two school subjects, specifically arithmetic and reading. The other school subjects, such as social studies, have not been given attention. Further, few, if any, studies to date have reported adult expectations as to how difficult and how interesting each school subject is for young children, specifically boys vis-a-vis girls, and also how hard they will have to work at each subject.

A second purpose of the present research was, therefore, to extend the study by Entwisle and Baker (1983). The extension consisted of determining whether aspiring parents and teachers had different expectations for young

boys vis-a-vis girls on all of the school subjects in terms of how difficult and how interesting each school subject would be for them, how hard they would have to work at each school subject, and how high their performance would be in each school subject. Following from the findings of Entwisle and Baker (1983), it was hypothesized that differences in expectations for young boys and girls would occur, at least in some school subjects such as math, among individuals who aspired to become parents and teachers.

One should also note that in the study of adults' expectations, the focus has almost always been on mothers, the expectations of fathers have been generally ignored. A third purpose of the present study was thus to determine whether there were sex differences between male and female aspiring parents and teachers in their expectations for young children.

Moreover, the present study attempted to determine whether SES of the participants, as measured by the averaged educational level of their parents (or guardians), along with the gender of a young child and gender of the participants, contributed significantly to the prediction of the participants' expectations for young children. SES was used as a predictor variable because it was shown to affect adults' as well as children's behaviors (see, e.g., Slavin, 1991).

Method

Participants. The participants in this study were 103 male and female students at a public university located in a city of about 50,000 in east central Wisconsin. All participants were white and were majoring in education intending to become teachers. There were 28 males and 75 females in the sample. Almost all of these students were either college juniors or seniors. These participants were recruited by the investigator on a voluntary basis. Specifically, as part of class activities in an education course, the students in the class were informed by the investigator that he was conducting a study on adults' expectations on young children and their voluntary participation in the study was encouraged. For those who decided not to partake, an alternative activity was provided. Practically all students in the classes volunteered to take part in the study.

Material. A questionnaire was used in this study. In the questionnaire, the participants were first asked to indicate their birthday, gender, whether or not they were a parent, and if they were not a parent, whether they expected to become a parent someday. (Only participants who indicated that they were not presently parents but expected to become parents someday were included in subsequent data analyses.) The participants were then asked to assume that they had a 6-year-old son (daughter) who would soon be entering grade one in school. This was asked of the participants for two

reasons. Firstly, it was hoped that this would help the participants to focus their attention on a child of the same target age. Secondly, this was done to address the issue raised in the previously-discussed study by Entwisle and Baker (1983), who noted ".....the influences we have identified are present when children start school and are probably present before then" (p. 209). In other words, this experimental manipulation was an attempt to determine whether gender-specific socialization processes involving adults' expectations on children was at work even before the latter started school. The questionnaire then asked the participants to indicate how high they expected the child's school mark in each school subject would be when the first report card came home, using a scale from 1 (very high) to 4 (very low). This scale was the same as used by Entwisle and Baker (1983). The participants were also asked in the questionnaire to indicate how difficult, how interesting they expected each school subject to be for their child and how hard they expected that their child would have to work at each school subject. The school subjects to which the aspiring parents and teachers were asked to respond were: math, music, physical education (P.E.), reading, and social studies. These are the school subjects that are commonly taught in the elementary schools and they were listed in that order in the questionnaire (i.e., alphabetically). In addition, the participants were asked to indicate their year

in college (i.e., class standing), and the amount of education completed by their parents (or guardians).

Procedure. As noted earlier, the participants were recruited to participate in this study on a voluntary basis by the investigator. Participants who volunteered to participate in this study were given a copy of the questionnaire to complete anonymously in the classroom as part of class activities. Half of the male and half of the female participants were each given a copy of the questionnaire in which the 6-year-old child was described as a son while the other half of the participants were given a copy of the questionnaire in which the 6-year-old child was described as a daughter. This procedure was undertaken so that an equal number of male and female participants would focus their responses on either a boy or a girl and they thus would not be directly comparing the two genders. It was emphasized to the participants that the questionnaire aimed to obtain their feelings/opinions only and, therefore, there were no right or wrong answers. They were told that they were always free to choose whether or not to answer a particular question. The investigator was available to clarify any questions that the participants might have and debriefed the participants on the purpose of the study after they all completed the questionnaire.

Results

Because one purpose of the study was to determine if there were sex differences in the participants' responses

based on the gender of the young child (i.e., the six-year-old) and the gender of the participants, a 2 x 2 (gender of young child x gender of participants) multivariate analysis of variance was conducted on participants' responses to each of the difficulty, interest, hard work, and school mark questions for the young child.

The results showed that significant findings were found only for participants' responses to the "interest" question. Specifically, a significant multivariate main effect of the gender of the young child was found, $F(5, 95) = 2.59$, $p < .05$. The effects of the gender of the participants and the interaction between the gender of the participants and the gender of the young child were not significant.

Results from the univariate analysis showed that the main effect of the gender of the young child occurred for participants' responses to the "interest" question in two school subjects, specifically one on the young child's interest in music ($F(1, 99) = 4.33$, $p < .05$) and the other on the young child's interest in P.E. ($F(1, 99) = 7.03$, $p < .01$).

An examination of the means showed that girls elicited higher perceived interest in music than boys (M's = 3.05 vs. 2.70) but they elicited lower perceived interest in P.E. than boys (M's = 3.14 vs. 3.56) from the participants.

Because a second purpose of the study was to determine whether the independent variables (gender of the young child, and gender and SES of the participants) contributed

significantly to the prediction of participants' responses to each of the difficulty, interest, hard work, and school mark questions for each school subject for the young child, stepwise multiple regression analyses were performed.

Since the sample size for males (n=28) is relatively small, the data for males and females were therefore analyzed as a group rather than separately. The results from these stepwise multiple regression analyses are summarized in Table 1.

Insert Table 1 about here

As can be seen from Table 1, child's gender was found to be a significant predictor for participants' responses to the expectation questions three times. Specifically, participants were found to expect boys to have greater interest in P.E. than girls but girls to have greater interest in music and higher school mark in reading than boys. The participants' gender and SES, on the other hand, was each found to be a significant predictor only once. Specifically, female participants were found to expect young children to work less hard in music than male participants, and higher SES participants expected children to be less interested in P.E. than lower SES participants. No other significant results were found.

It is of interest to note here that the child's gender was found to have a significant effect on participants'

perceived interest in P.E. and music in two different analysis strategies, namely, analysis of variance and stepwise multiple regression analysis, despite the relatively small number of significant findings. This finding thus attests to the robustness of gender difference in these two school subjects.

Participants' responses to each of the difficulty, interest, hard work, and school mark questions for each of the five school subjects (again, math, music, P.E., reading, and social studies) were also intercorrelated, and the results are shown in Table 2.

Insert Table 2 about here

As can be seen from Table 2, across subject areas, the higher the participants expected the child's interest in a school subject, the less they expected the child's difficulty with the school subject, the less hard they expected the child would have to work for that school subject, and the higher they expected the child's school mark for that subject. Conversely, the less the participants expected the child's interest in a school subject, the more difficulty they expected the child would have with that school subject, the harder they expected the child would have to work for that school subject, and the lower they expected the child's school mark for that school subject.

Discussion

It should be noted that in the present study, the gender of the young child was not found to affect aspiring parents' and teachers' expectation for the child's school mark in math. This is especially interesting given that the present sample paralleled that of Entwisle and Baker (1983) in that most of the participants were females. Given the findings of Entwisle and Baker (1983) that the gender of a young child elicited differential parental expectations for school mark in math, the present finding suggests that as far as the expectation for the math performance of young children is concerned, what holds true for parents apparently does not hold true for aspiring parents and teachers. This is an encouraging finding since it suggests that aspiring parents and teachers are not sex-typed with regard to their expectation for young children's performance in math. This finding may also be a reflection of the growing realization that sex differences in achievement may be attributed to psychosocial rather than biological factors.

The finding that children's gender predicted aspiring parents' and teachers' expectation about children's school mark in reading for young children is consistent with the common observation that boys are more likely to have difficulty with reading and thus do more poorly than girls, at least in this country (see, e.g., Sabers, Cushing, & Sabers, 1987; Martin & Hoover, 1987).

Good and Brophy (1986) presented data showing that in other countries (e.g., England, Germany) boys read better than girls and suggested that sex differences in reading performance may be a result of societal expectations. The present findings seem to reinforce this position. The implication of the present findings is that the differential adult expectations should be drawn to the attention of teachers, parents and others who work with children. In this way, one might hope to combat the negative consequences that might result from such differential expectations.

The present findings on expected interest in P.E. and music replicate those reported in an earlier study by Leung (1990). Using rank ordering (rather than rating) and a different, but comparable, sample of participants, Leung (1990) found that aspiring parents and teachers ranked P.E. to be more intersting for young boys, but music to be more interesting for young girls. These findings, which were based on two different measurement strategies (ranking and rating), three different statistical analysis strategies (Kruskal-Wallis Test, analysis of variance, and multiple regression analysis), and from two independent but comparable samples of participants, thus indicate the consistencies and robustness with which P.E. and music are sex-typed for young children by aspiring parents and teachers.

This finding on P.E. corroborates the observed sex differences in sports participation by children and youth in

favor of males (see, e.g., Martens, 1986). Given that the very nature of sports requires that participants be competitive and aggressive, the present finding on P.E. also appears to be consistent with the traditional stereotyped perception that males are more competitive and aggressive compared to females (see, e.g., Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). The present finding is also consistent with that of Block (1984), who reported that both fathers and mothers tended to emphasize competition more for their sons than for their daughters.

If males are socialized to be competitive and aggressive more than females, then one may argue that it is adults' beliefs, expectations and behaviors, in other words, the socialization of children, that may account for the differential involvement in sports activities between the two sexes. While the data from the present study cannot be used to test this assertion, it is hoped that they serve to stimulate further research to address this claim.

That higher SES participants were found to tend to perceive P.E. to be of less interest to young children is an interesting finding. It may be explained in terms of the observation that intellectual achievement is generally more valued in higher than lower SES homes (see, e.g., Slavin, 1991). Given that students of higher SES tend to have higher academic achievement (see, e.g., Borich, 1988; Levine, 1979) and that higher academic achievement usually requires more

efforts and time in addition to intellectual ability, this finding is an understandable one.

The present finding that aspiring parents and teachers expected music to be more interesting for girls than boys, on the other hand, may reflect the fact that music is a less competitive and physically aggressive activity than sports and, following traditional sex-stereotypes, may be expected to have more appeal to females than males.

The findings from the present study thus provide further evidence to show that the gender of young children tends to elicit differential expectations from adults, at least with regard to P.E., music, and reading.

Given that college students are known to be more enlightened in terms of social attitudes than the general population, one might speculate that the population at large may be even more sex-typed in their expectations and beliefs for young children than the population of college students.

The finding that males tend to expect young children to work harder, and females tend to expect young children not to work as hard, in music appears to be another example of sex stereotype. It corroborates the finding discussed earlier that participants expected young boys to have less, and young girls to have more, interest in music. Together, these findings seem to portray that music is one subject area that is more "natural" to females than males. Perhaps further research may be conducted to determine if sex differences in the perception of music indeed exist.

The correlation between participants' expected interest in a school subject for young children and other measures in the present study (see Table 2) is substantial in almost every instance. For example, the correlations between expected interest and expected school mark for math, music, P.E., reading and social studies are, respectively, .42, .50, .39, .53, and .69. These substantial positive correlations thus indicate that the higher the expected interest in a school subject, the higher the expected school mark for that school subject. One implication of these findings is that it is important to educate aspiring parents and teachers (and other adults) about the role of expected interest in school subjects for young children. A second implication of these findings is to determine whether interest in a school subject is positively related to the school mark for that school subject among young children. If this is found to be the case, then the implication is that it is important not only to foster young children's interest in the school subjects, but also to determine exactly what can be done that might help foster young children's interest in the school subjects.

One general implication of the findings from the present study is that sex-typed academic expectations or beliefs such as those found in this study should be drawn to the attention of aspiring parents and teachers as well as others who work with young children. Given that beliefs influence actions (see, e.g., Hess, 1981; Hess & Holloway,

1984; Scott-Jones, 1984), every effort should be made to help adults, particularly aspiring parents and teachers, to avoid forming sex-typed beliefs and expectations, thereby enhancing the opportunity for young children of both sexes to develop their potential to the fullest. This is especially noteworthy given that the aspiring parents' and teachers' expectation as to how interesting the school subjects were was found to be negatively (and also substantially) related to their expectation as to how difficult the same school subjects were for the young child (see Table 2). The significance to be underscored here is that adults' expectation and beliefs as to how interesting and how difficult a particular school subject is for a young child might influence their behaviors toward the child, thereby affecting the child's achievement in that particular school subject.

Another related implication, based on the intercorrelations among aspiring parents' and teachers' expectation in the difficulty, interest, hard work, and school mark in each school subject for the young child, is that since beliefs and expectations influence actions (again, see, e.g., Hess, 1981; Hess & Holloway, 1984; Scott-Jones, 1984), one needs to be aware of these beliefs and expectations and use them to guide one's actions in such a way that might enhance, rather than impede, children's achievement in the school subjects.

Also, it would be interesting to determine if the relationships found in the present study among expected interest, difficulty, hard work, and school mark actually exist among young children. Moreover, it would seem important to determine the process in which differential adult beliefs and expectations are formed, and the manner in which these beliefs and expectations actually influence their behaviors toward children.

References

Block, J. H. (1984). Parental and societal influences on sex role. In J. H. Block (Ed.), Sex role identity and ego development (pp. 65-99). San Francisco, CA: Jossey-Bass Publishers.

Borich, G. D. (1988). Effective teaching methods. Columbus, OH: Merrill Publishing Co.

Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. (1970). Sex-role stereotypes and clinical judgments of mental health. Journal of Consulting and Clinical Psychology, 34, 1-7.

Crandall, V. C. (1969). Sex differences in expectancy of intellectual and academic reinforcement. In C.P. Smith (Ed.), Achievement-related behaviors in children. New York: Russell Sage.

Entwisle, D. R., & Baker, D. P. (1983). Gender and young children's expectations for performance in arithmetic. Developmental Psychology, 19, 200-209.

Good, T. L., & Brophy, J.E . (1986). Educational Psychology, (3rd Ed.). New York: Longman.

Hess, R. D. (1981). Approaches to the measurement and interpretation of parent-child interaction. In R.W. Henderson (Ed.), Parent-child interaction: Theory, research and prospects. New York: Academic Press.

Hess, R. D., & Holloway, S. D. (1984). Family and school as educational institutions. In R. D. Parke (Ed.), Review of child development research (pp. 179-222). Chicago, IL: University of Chicago Press.

Leung, J. J. (1990). Aspiring parents' and teachers' academic beliefs for young children. Sex Roles: A Journal of Research, 23, 83-90.

Levine, D. (1979). Concentrated poverty and reading achievement in seven big cities. The Urban Review, Summer, 63-80.

Marcus, T. L., & Corsini, D. A. (1978). Parental expectations of preschool children as related to child gender and socioeconomic status. Child Development, 49, 243-246.

Martens, R. (1986). Youth sports in the U.S.A. In M. Weiss & D. Gould (Eds.), Competitive sports for children and youth. Champaign, IL: Human Kinetics.

Martin, D. J., & Hoover, H. D. (1987). Sex differences in educational achievement: A longitudinal study. Journal of Early Adolescence, 7, 65-83.

Rodman, H., & Voydanoff, P. (1978). Social class and parents' range of aspirations for their children. Social Problems, 25, 333-344.

Rosen, B., & D'Andrade, R. (1959). The psychosocial origins of achievement motivation. Sociometry, 22, 185-218.

Sabers, D., Cushing, K., & Sabers, D. (1987). Sex differences in reading and mathematics achievement for middle school students. Journal of Early Adolescence, 7, 117-128.

Scott-Jones, D. (1984). Family influences on cognitive development and school achievement. In E. W. Gordon (Ed.), Review of research in education (Vol. 11, pp. 259-304). Washington, DC: American Educational Research Association.

Seginer, R. (1983). Parents' educational expectations and children's academic achievements: A literature review. Merrill-Palmer Quarterly, 29, 1-23.

Slavin, R. E. (1991). Educational psychology: Theory into practice (3rd. ed.). Englewood Cliffs, NJ: Prentice-Hall.

Winterbottom, M. R. (1958). The relation of need for achievement to learning experiences in independence and mastery. In J.W. Atkinson (Ed.), Motives in fantasy, action, and society. Princeton, NJ: Van Nostrand.

Table 1

Multiple Regression Analysis Summary:

Child's Gender and Adults' Status Variables

	Predictor(s) Entered	Beta Weight	Multiple R/ Adj. R Sq.	Increment in R Sq.
Interest				
Music	Child's Gender	.27**	.27*/.06	.07**
P.E.	Child's Gender	-.26**	.27**/.06	.07**
	SES	-.19*	.33**/.09	.04*
Hard Work				
Music	Gender	-.23*	.23*/.04	.05*
School Mark				
Reading	Child's Gender	.24*	.24**/.05	.06*

Note.
N=101.
Gender and Child's Gender: 1=male, 2=female.
*p < .05. **p < .01.

Table 2

Intercorrelations Among Participants' Expectation of Difficulty, Interest, Hard Work and School Mark for Each of Five School Subjects

Math	Difficulty	Interest	Hard Work	School Mark
Difficulty	---	-.23*	.42***	-.34***
Interest		---	-.18*	.42***
Hard Work			---	-.40***
School Mark				---
Music	**Difficulty**	**Interest**	**Hard Work**	**School Mark**
Difficulty	---	-.37***	.54***	-.66***
Interest		---	-.27**	.50***
Hard Work			---	-.53***
School Mark				---
P.E.	**Difficulty**	**Interest**	**Hard Work**	**School Mark**
Difficulty	---	-.46***	.30***	-.44***
Interest		---	-.14	.39***
Hard Work			---	-.05
School Mark				---
Reading	**Difficulty**	**Interest**	**Hard Work**	**School Mark**
Difficulty	---	-.40***	.50***	-.56***
Interest		---	-.19*	.53***
Hard Work			---	-.40***
School Mark				---
Social Studies	**Difficulty**	**Interest**	**Hard Work**	**School Mark**
Difficulty	---	-.40***	.51***	-.34***
Interest		---	-.38***	.69***
Hard Work			---	-.45***
School Mark				---

Note:
N=102 or 103.
*p < .05. **p < .01. ***p < .001.